

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM M. BELTZ

Appeal No. 2004-1025
Application No. 09/572,674

ON BRIEF

Before STAAB, MCQUADE, and NASE, Administrative Patent Judges.
MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

William M. Beltz appeals from the final rejection of claims 1 through 15, all of the claims pending in the application.

THE INVENTION

The invention relates to "a device held in the mouth and useful by individuals having limited or no use of their hands to simulate mouse manipulation in Graphical User Interface (GUI) applications" (specification, page 2). Representative claim 1 reads as follows:

1. A device for permitting a person with limited or no use of the hands to operate and manually input data into a computer that utilizes a graphical user interface application, said device comprising:
a mouth-held unit comprising

(a) a mouthpiece having an airway passage formed therethrough,
(b) a shaft having one end secured within said mouthpiece and a distal end configured for performing keyboard entry, wherein said shaft includes a hollow portion aligned with and fluidly connected to said airway passage, and
(c) a control module attached to said shaft, wherein in said module includes,
i) a switching means fluidly connected to said hollow portion, wherein said switching means generates a first signal in response to an air pressure signal initiated by the person at said air passage,
ii) at least one emitting means for transmitting the first signal and a second signal; and
a reception unit with a first detector means for detecting said first signal and a second detector means for detecting said second signal.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

De Bruyne	4,758,691	Jul. 19, 1988
Sauer et al. (Sauer)	4,828,418	May 9, 1989
Koizumi et al. (Koizumi)	5,883,616	Mar. 16, 1999

THE REJECTION

Claims 1 through 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koizumi, Sauer and De Bruyne.

Attention is directed to the brief (Paper No. 12) and answer (Paper No. 13) for the respective positions of the appellant and examiner regarding the merits of this rejection.

DISCUSSION

Koizumi, the examiner's primary reference, discloses a word processing input apparatus "that allows those who are severely physically handicapped . . . to enter characters by shifting their heads and operating a breath-operated switch while looking at an image display device on which entered characters are shown" (column 1, lines 5 through 9). The apparatus comprises a headset device 4 including an optical signal transmitter 1 and a breath-operated switch 5, and an image display device 3 (e.g., a personal computer) including an optical signal receiver 2. In use, the operator dons the headset, sits opposite the image display device which shows a virtual keyboard 17 and a cursor 18, moves his or her head to shift the cursor to a desired key and actuates the breath-operated switch to enter the character designated by the selected key (see column 5, line 48, through column 7, line 13).

The examiner (see pages 3 and 4 in the answer) concedes that the Koizumi apparatus does not respond to the limitations in independent claim 1, or the corresponding limitations in independent claim 9, relating to the mouth-held unit or device. As indicated above, the Koizumi apparatus embodies a head-held

unit or device. To cure this shortcoming in Koizumi, the examiner turns to Sauer.

Sauer discloses a mouthstick, a mouth-held device for use by individuals having limited or no use of their hands. The mouthstick 10 comprises a mouthpiece 11, a shaft 13 extending from the mouthpiece and a functional implement on the distal end of the shaft. The implement may be, for example, a soft rubbery tip 14 (which can be used to turn pages), a pen, a pencil, a brush or any similar device.

In proposing to combine Koizumi and Sauer to reject claims 1 and 9, the examiner submits that

Clearly, it would have been advantageous for a disabled user to have a single device capable of performing manual tasks and for operating a computer. In fact, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the relevant teachings of Sauer and Koizumi so that users could conveniently perform routine tasks and input computer data without having to constantly switch devices [answer, page 4].

In response to the appellant's argument that Koizumi and Sauer would not have suggested this combination, the examiner (see page 7 in the answer) cites In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992) for the principle that motivation to combine references need not be found explicitly in the references

themselves, but can also be found in the knowledge generally available to one of ordinary skill in the art. The examiner then applies this principle to the present case with the following explanation:

A better understanding of what knowledge would have been available can be obtained by examining the problem that each reference solves. For instance, Sauer's invention allows individuals without use of their hands to perform a great variety of manual tasks such as turning the pages of a book. Koizumi's invention, on the other hand, provides the same individuals with a much improved method and apparatus for keyboard input. Accordingly, it would have been known that both inventions greatly benefit severely handicapped individuals. Furthermore, using both of them at various times throughout the day, or even simultaneously, would have provided the individuals with the freedom to perform numerous activities without the help of attendants. However, it would have been immediately recognized that an individual could not in fact have used the inventions simultaneously because it would have been extremely uncomfortable to hold Sauer's mouth stick and Koizumi's operating port in one's mouth at the same time. This conclusion is not based on improper hindsight reasoning, but rather a logical analysis of the functional capabilities of each invention. One of ordinary skill in the art, furthermore, would have drawn the same conclusion with the two inventions before them. The problem would have then remained as to how a handicapped individual could operate a computer and still perform other routine, and sometimes critical, activities. The obvious solution would have been to combine the two inventions into one [answer, pages 7 and 8].

Notwithstanding the examiner's assertion to the contrary, the foregoing rationalization is a classic example of improper hindsight reasoning. The fair teachings of Koizumi and Sauer

provide no evidentiary support for the examiner's conjecture regarding the purported benefits of simultaneously using the devices respectively disclosed by these references or the recognition of these benefits by a person having ordinary skill in the art. Rejections based on 35 U.S.C. § 103(a) must rest on a factual basis. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 177-78 (CCPA 1967). In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. Id. In the present case, the examiner's unfounded assumptions as to the knowledge generally available to a person of ordinary skill in the art and undue speculation as to what this purported knowledge would have suggested to such a person are no substitutes for the evidence required by law to support a conclusion of obviousness.

As the examiner's application of De Bruyne fails to rectify the foregoing evidentiary deficiencies in the Koizumi and Sauer combination, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of independent claims 1 and 9, and dependent claims 2

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through 8 and 10 through 15, as being unpatentable over Koizumi,
Sauer and De Bruyne.

SUMMARY

The decision of the examiner to reject claims 1 through 15
is reversed.

REVERSED

LAWRENCE J. STAAB)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
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)	APPEALS AND
JOHN P. MCQUADE)	
Administrative Patent Judge)	INTERFERENCES
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JEFFREY V. NASE)	
Administrative Patent Judge)	

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